Users Manual

LOKPRINT™ II

Industrial Apparel Label Station

Operation / Maintenance And Parts List

AVERY DENNISON
Manual Edition 4.0
9 June 2010

Manual Part Number 561398

This page intentionally left blank

Contents

Scope 5

Introduction 5

Safety Issues / Warnings 5

Caution 5
Heaters 5
Feed Roller 5

Warranty Information 6

Location / Power Requirements 8

Location of LOKPRINT™ II System 8
Recommended Work Station Layout. 8
AC Power Line 8
LOKPRINT™ II Main Line Protection 9
LOKPRINT™ II Internal Fuse Configuration 9
Branch Circuit Protection 9

Unpacking / Inventory 10

Unpacking 10
Inventory of Components 11
Recommended Spare Parts 11

LOKPRINT™ II Assembly 12

Installation Setup Procedure 12
System Interface Cable Connections 13
Installing the Power Cord 13

Product Description 14

Theory of Operation 14
Description of Operation 14
Hands free operation 14
Interlocks 14
LOKPRINT™ II Specification 15

LOKPRINT™ II Operation / Adjustments 16

Jam Sensor 16
Ventilation 17
Feed Roller 18
Web Threading 18
Heat Chamber Care 19
Feed Roller Care 19

Lamp Replacement Procedure 20

Drive Cable Replacement Procedure 22

Installing the Drive Cable at the Capstan 22

Troubleshooting 23

Interlock Trouble Shooting Guide 24

Electrical Schematic 27

115 / 230 Volt Schematic 28

Mechanical Assembly Drawings 29

Cover Assembly 30
Cover Parts List 31
Baffle Assembly 32
Baffle Parts List 33
Air Filter Assembly 34
Air Filter Parts List 35
Web Guide Assembly 36
Web Guide Parts List 37
Drive Assembly 38
Drive Parts List 39
Feed Assembly 40
Feed Parts List 41
Controller Assembly 42
Controller Parts List 43
Heat Chamber Assembly 44
Heat Chamber Parts List 45
Slide Mechanism Assembly 46
Slide Mechanism Parts List 47
Cable Routing Diagram 48
Home Sensor Assembly 50
Home Sensor Parts List 51

Scope

Introduction

This user manual was arranged for the person who is going to operate the system. The information is arranged in the order that is needed to install, and then operate the system. It starts with general information, then to unpacking the carton, setup, installing the supplies, machine operation, and then finally care and maintenance.

We at AVERY DENNISON hope that you will come to appreciate the efforts and quality that have gone into producing your AVERY DENNISON LOKPRINT™ II System and wish to remind you that you are our number one priority. We welcome any constructive comments or criticisms so that we may continue to offer you the best products in the industry for years to come.

Safety Issues / Warnings

Caution

This system has some pinch points and hot surfaces. All of these areas have been well guarded and it is recommended that the safety features of this system are never altered or defeated.

Heaters

The heat chamber has been designed to prevent the operator from coming into contact with areas that will cause burns during normal operation. Some surfaces are very warm to the touch. The IR lamps and internal lamp guards are extremely hot. Extra care should be taken when threading the machine while the machine is turned on. Any maintenance or cleaning should be done after the machine has been turned off and allowed to cool.

Feed Roller

The feed rollers will absorb heat from the web as the machine runs. These rollers have a self-closing cover to avoid contact during operation. The feed system is also equipped with an operator knob to advance the fabric forward and backwards as needed to avoid touching the hot rollers.

CAUTION: TURN OFF THE POWER AND ALLOW THE MACHINE TO COOL BEFORE CLEANING.

Warranty Information

Warranty Policy

Avery Dennison Retail Information Systems, In-Plant Printing Solutions provides the following warranty policy.

Scope

Warranties against defects from workmanship for equipment and parts manufactured and sold from Sayre, PA. Includes time and material except as otherwise noted below.

Time

- New equipment and parts: 6 months
- Refurbished equipment and parts: 90 days
- Warranty period starts when equipment ships from selling location.

General Conditions

Avery Dennison extends warranty coverage under the following conditions.

- Equipment and parts will perform within published specifications. Promised or implied statements by any Avery Dennison employee or representative will not be deemed to vary the terms of the warranty.

- Equipment and parts must be installed and operated according to recommended procedures and operating conditions.

- Consumable elements are not covered. Consumable elements are those that show normal wear from typical equipment usage including, without limitation, printheads, knives, rollers in contact with the web, and sonic units. Avery Dennison reserves the right to determine which elements are defined as "consumable."

- No customer maintenance may be performed except as directed by qualified Avery Dennison personnel.

- Equipment and parts damaged by negligence or abuse are not covered.

- Avery Dennison US reserves the right in its sole discretion to incorporate any modifications or improvements in the machine system and machine specifications which it considers necessary but does not assume any obligation to make said changes in equipment previously sold.

Equipment Purchased In US and Shipped In US

- Avery Dennison US covers warranty for equipment and parts installed and operated in the Americas (United States, Canada, Mexico, Central America, Caribbean Region, and South America excluding Brazil).

- Outside the US, the local Avery Dennison office is responsible for equipment and parts warranty. Customers must ensure coverage during machine purchase.

- Equipment purchased and exported to regions outside local Avery Dennison office coverage are not covered by warranty. The purchasing agent must acquire a service contract from the Avery Dennison office where the equipment or parts are operated to ensure machine coverage. For example, if an agent purchases a printer in the US, exports to Brazil, and then needs warranty coverage, Avery Dennison Brazil has no obligation to provide warranty coverage. The agent must purchase services from Avery Dennison Brazil.

THE WARRANTIES PROVIDED HEREIN ARE EXCLUSIVE AND ARE IN LIEU OF ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY OR PERFORMANCE, WHETHER EXPRESS OR IMPLIED. EXCEPT THE WARRANTY OF TITLE, IN NO EVENT SHALL AVERY DENNISON BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, EVEN IF AVERY DENNISON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Service

When ordering machines and supplies in the U.S.A., reference all correspondence to the address below.

AVERY DENNISON Corporation

One Wilcox Street

Sayre, PA 18840

Call: 1-800-967-2927 or (570) 888-6641

Fax: (570) 888-5230

For spare parts, requests for service or technical support, contact

AVERY DENNISON Corporation

One Wilcox Street

Sayre, PA 18840

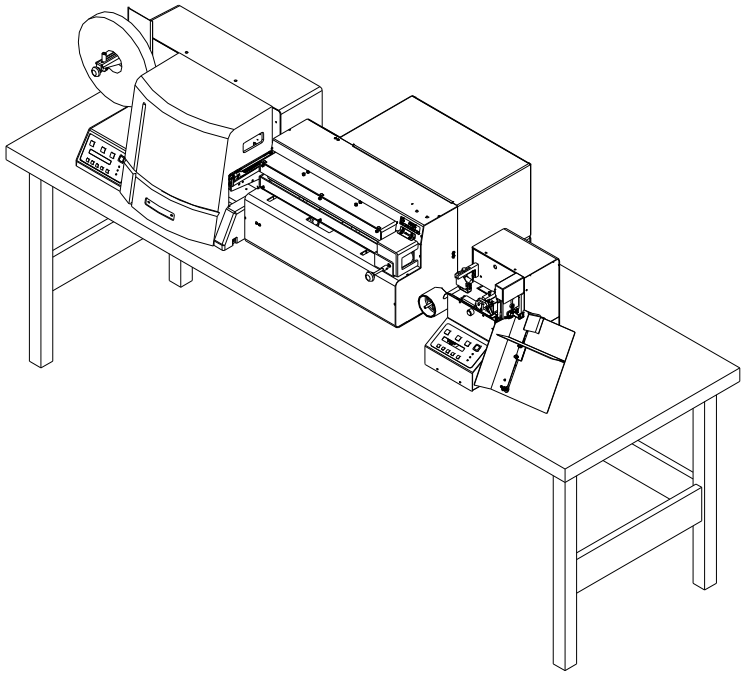
Call: 1-800-967-2927 or (570) 888-6641

Fax: (570) 888-5230

For parts and service in other countries, please contact your local AVERY DENNISON supplier.

Location / Power Requirements

Location of LOKPRINT™ II System



Recommended Work Station Layout.

The LOKPRINT™ II requires a workstation with a minimum worktable of 30" (76.2cm) deep x 96" (243.8cm) long x 30" high (adjustable height may be desired depending on if the operator will be standing or seating). The worktable does not include a space for the computer. The table must be capable of supporting 300 Lbs. (136.1Kg).

The LOKPRINT™ II should be installed with the alignment template included to ensure the fabric tracks properly from the printer into the LOKPRINT™ II. Locate the Finishing Station or Cold Knife Cutter as close to the exit of the LOKPRINT™ II as possible without restricting its dancer arm travel.

AC Power Line

The LOKPRINT™ II requires an electrical service of 20A @ 115V **or** 10A @ 230V and must be purchased as a 115 or 230 volt electrical configuration. Check the machine's serial number plate to make sure the machine is the desired electrical line voltage. Power consumption is 18 amps @ 115 volts and 9 amps @ 230 volt. Connect the power cord to a grounded 115 or 230 volt AC electric outlet of sufficient

power. Because of the higher current draw of the LOKPRINT™ II, the printer / Finishing Station or Cold Knife should be on a separate electrical service of 15A. Refer to the Printer and Finishing Station or Cold Knife serial number plates for their line requirements. Please check with your local electrical code and have the system wired by a qualified electrician.

LOKPRINT™ II Main Line Protection

The LOKPRINT™ II main AC power switch also serves as a resettable circuit breaker. The 115V machine incorporates a 20A breaker while the 230V machine uses a 10A breaker.

LOKPRINT™ II Internal Fuse Configuration

Branch Circuit Protection

Both controllers and the feed motor drive circuit have a 5x 20mm fuse as per the following chart.

Device	Fuse Designator	AVERY DENNISON Part #	115 VAC & 230VAC
U1	F3	990754	1.0A 250V FA 5x20mm
U2	F4	990754	1.0A 250V FA 5x20mm
Web Feed Motor	F6	990915	1.6A 250V TL 5x20mm

Unpacking / Inventory

Unpacking

The AVERY DENNISON equipment is shipped in a large cardboard box, which may be difficult to move by hand.

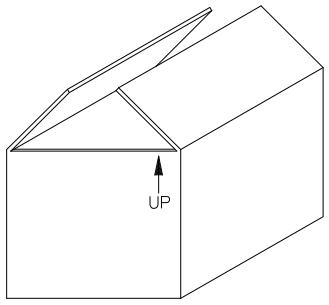
DO NOT REMOVE THE MACHINE FROM THE BOX OR UNPACK IN THE SHIPPING / RECEIVING DEPARTMENT.

NOTE: Unpacking in the shipping/receiving department is not recommended for the following reasons.

First: The cardboard carton in which your AVERY DENNISON equipment was shipped allows the machine to be moved with a forklift, forkcart or handcart. Because of the weight of the machine, it is easier and safer to use one of these devices to move the equipment to its intended installation location.

Second: Leaving the machine in the carton while it is being moved within your facility will help to protect the equipment during any movements to this location. Once the equipment has reached its intended location you should begin the unpacking process.

Open the carton from the top. Do not cut deep into the carton, as there are items located just under the top. Remove the items located on the top insert. Remove the top insert. Lift the machine onto the table with the two banding straps. Remove the two straps and the plastic from the machine. Inspect the machine for shipping damage. If damage is discovered, contact AVERY DENNISON for further instructions - in the U.S.A. at (570) 888-6641. In other countries please contact your local AVERY DENNISON supplier. Once you are satisfied that there was no obvious shipping damage, the machine can now be moved to its intended location. In some cases, a double box has been used to ship your machine.



Shipping Carton.

Save the shipping materials to relocate the equipment or return to factory for service.

Inventory of Components

The following is a list of additional parts (pieces) that should be included in your LOKPRINT™ II shipping container. If anything is missing notify AVERY DENNISON immediately – in the U.S.A. at (570) 888-6641. In other countries contact your local AVERY DENNISON supplier.

- AVERY DENNISON LOKPRINT™ II "User's Manual".
- Quick-disconnect power cord.
- Printer / LOKPRINT™ II positioning template.

Recommended Spare Parts

The following spare parts are recommended for each facility that has a LOKPRINT™ II

Spare Parts Kit 560010 120V / 230V contains the following parts.

Part #	Description	Qty
224045	Timing belt 1/5P 72T	1
561120	Elec, Quartz lamp, Harnessed	4
564010	Spring, Feed, Right	2
564011	Spring, Feed, Left	2
564030	Assembly, Grit roller, Upper	1
564031	Assembly, Grit roller	1
990754	Fuse, 1.0A 250V F.A. 5 X 20mm	2
991113	Drive, Timing belt, 54T X ¼"	1

LOKPRINT™ II Assembly

Installation Setup Procedure

1) Assemble the system components and connect all the interface cables between the three components.
2) Check / set the Printer TCB DIP switches for a 676 with stacker jam disabled (1, 3, and 4 ON / all others OFF).
3) Power on the Printer, Lokprint II, and Finishing Station for warm up.
4) While the Lokprint II Ready light is still off close the Lokprint II and Finishing Station guards, raise the Finishing Station stacker platform, and check / enter the value for Calibrate Sensor "Stacker Not Blocked" on the 676. This value should be somewhere around "40". Once the ready light comes on check / enter the value for "Stacker Blocked". This value should be somewhere around "225".
5) Load fabric and ink on the Printer, advance the fabric though the Lokprint II.
6) Once all interlocks are satisfied press the start button on the printer to clear any remaining errors, the front panel should now read "Ready For Batches / Lokprint II".
7) Download data to the Printer, this format should include a printed sense mark for the Finishing Station to register.
8) Press start again and allow the system to run until there are sufficient printed labels to thread and register in the Finishing Station.
9) Thread the Finishing Station and align the sensor / sense mark for registration. The sense mark must be the first thing the sensor sees when you start the Finishing Station.
10) Set the Finishing Station settings on its front panel as needed for the format and start the Finishing Station in order to remove the slack between the Lokprint II and the Finishing Station. The Speed adjustment should be set to provide constant tension on the fabric between the Lokprint II and the Finishing Station with the least Finishing Station stopping and starting.
11) Start the system, while running take note of the Lokprint II oven position in relation to the oven insulation strip secured to the Plexiglas guard. The oven should fully engage the strip squarely from one end of the oven to the other. The oven position is controlled by a C sensor sensing a metal flag bolted to the back of the outer oven. Check / adjust the sensor position as needed to cause the oven to travel to the desired position. The guard insulator strip can be adjusted up or down as needed by loosening it's mounting hardware and relocating it accordingly.

    The Lokprint II back cover will need to be removed to make the sensor adjustment. Do not attempt to run the system with the cover removed, as the process will over heat for lack of controlled airflow around the oven.
12) Check / adjust both guard switch bales as needed to cause both switches to trigger only when the guard is closed.

13) Once the oven position has been checked / adjusted - run the system and take note of the fabric position in relation to the oven as it enters the oven. Adjust the Lokprint II box forward or backwards on the bench in relation to the printer using the template / mount knob. The web position collars on the 676 are more for a reference then position. Do not use them to deflect the web, as wrinkling will occur. Do set them to the web edges after the Lokprint II position has been adjusted to cause the fabric to flow into the oven centered front to back.

14) Once the Lokprint II position has been checked / adjusted - run the system and adjust the Finishing Station on the bench forward or backwards in relation to the Lokprint II box so that the fabric flows straight into the Finishing Station's web guides.

15) Using the CALIBRATION PROCEDURE section of IS 561301 Rev 2 or higher check / adjust U1 and U2 offsets as needed to produce and monitor the exit temperature at 400° while running stabilized.

    Note: Requires AVERY DENNISON Service

16) Using the SP2 ADJUSTMENT PROCEDURE section of IS 561301 Rev 2 or higher check / adjust U1 SP2 as needed to transition from idle to running without deforming the fabric or dipping in process temperature.

    Note: Requires AVERY DENNISON Service

System Interface Cable Connections

Connect both the 7 and 15 pin cable connectors located on the left side of the LOKPRINT™ II to the host printer. Connect the 7-pin cable connector located on the Finishing Station or Cold Knife to the 7-pin receptacle located on the right side of the LOKPRINT™ II.

Installing the Power Cord

Both the 115V and 230V machines incorporate a quick disconnect power cord. The 115V cord requires a NEMA 5-20R receptacle while the 230V cord requires a NEMA 6-15R receptacle. Install the receptacle end of the power cord in the plug on the back of the machine then insert the plug end of the cord in the appropriate wall outlet.

Product Description

Theory of Operation

The LOKPRINT™ II was designed to receive labels printed on both sides from a AVERY DENNISON 676 printer or one sided from a AVERY DENNISON 636 printer using dye sublimation inks. The LOKPRINT™ II dye sublimates the labels and feeds a Finishing Station for ultrasonic or cold knife cutting. The LOKPRINT™ II is equipped with four infrared (IR) quartz heating bulbs and two non-contact IR heat sensors with one PID controller controlling the process and a second monitoring the fabric temperature. The PID controller controls an SCR that regulates the energy provided to the quartz bulbs, which produces the heat. The PID control, IR sensor, SCR, and quartz bulbs are all part of an automatic, "closed loop" system to ensure fully sublimated labels.

Once connected, all components of the LOKPRINT™ II act as a system, including the Printer, LOKPRINT™ II and the Finishing Station. Optimum dye sublimation occurs between the temperatures of 400° - 420° F (205° - 215.5° C) inside the heat chamber. The LOKPRINT™ II will shut the printer down if the web temperature drops below 400° F (205° C). This closed loop system approach ensures maximum sublimation and minimum label waste.

Description of Operation

Hands free operation

Once the LOKPRINT™ II has been threaded, very little operator input is needed. As the fabric moves through the heat chamber - the PID controllers control and monitor the web temperature according to web speed. The LOKPRINT™ II is threaded with the heat chamber in a parked (back) position. When the printer's start button is pushed, the heat chamber will move forward to the operating position that covers the web - heating it to the desired temperature.

If the "stop" button on the printer is pushed or if the system shuts down automatically, the heat chamber will move back to the parked position.

Interlocks

During operation, the LOKPRINT™ II will shut down the system automatically, if one or more of the following conditions exist. See the Printer and or Finishing Station manuals for their interlocks.

(1) Power lost to the LOKPRINT™ II.

(2) LOKPRINT™ II power switchable circuit breaker exceeds safe current or temperature levels.

(3) Oven didn't reach the operating position in time at startup.

(4) No web in web sensor.

(5) Heat chamber thermostat temperature exceeds safe limit.

(6) Web under temperature alarm.

(7) Oven over temperature alarm.

(8) Guard open.

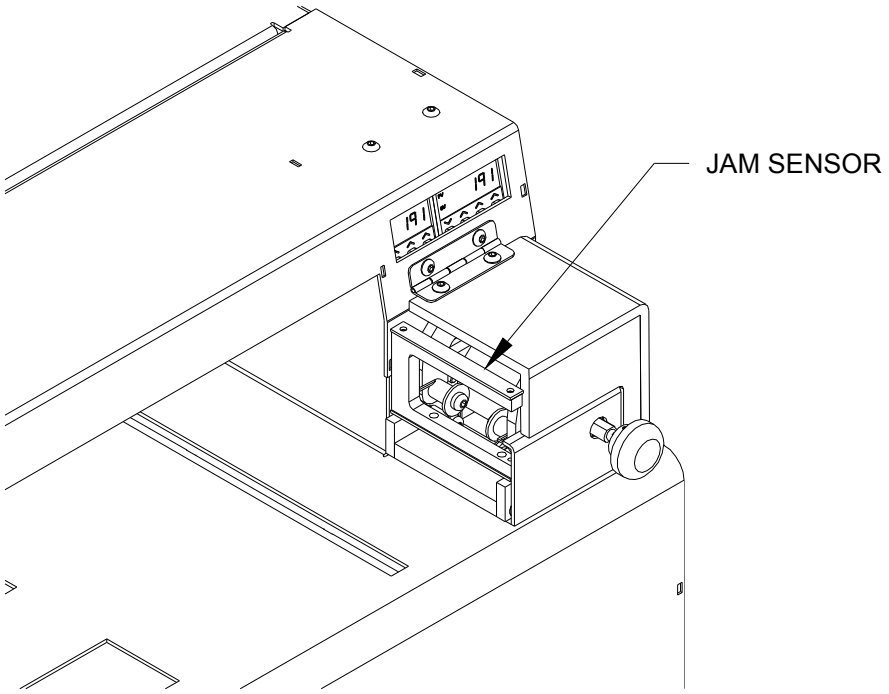
The recommended room temperature for the system is 60°F (15.5°C) to 90°F (32.2°C). If a cooling system is required it should not be pointed directly at the system to create drafts that could affect the sublimation process.

LOKPRINT™ II Specification

Sublimation method:	Non-contact Narrow polyester web Dye sublimation thermal transfer inks
Web speed:	Speed – 5 IPS - (127mm/second)
Web Size:	Min: 1.062" (27mm) Max: 2.0" (50.8mm) Feed length: No restrictions on the LOKPRINT™ II station
Cutting:	No cutter included in LOKPRINT™ II station
Interface:	AVERY DENNISON 636LKP (one sided) AVERY DENNISON 676LKP (2 over 0, 1 over 1 and 2 over 1) thermal printers
Finishing method interface:	SS Finisher (ultra sonic cutter with stacker) Cold knife (cutter and stacker) 12” Rewind
Dimensions	13.5" (34.5cm) high x 26.5" (67.3cm) wide x 23.5" (59.7cm) deep
Weight	58 Lbs. (26.3Kg.) Shipping Weight = 81 Lbs. (36.7Kg.)
Electrical	115 volt system: 90-132 VAC 50-60Hz 20Amp 1 Phase. 230 volt system: 180-265 VAC 50-60Hz 10Amp 1 Phase.
Temperature	60°F (15.5°C) to 90°F (32.2°C)
Humidity	5% to 90% non-condensing

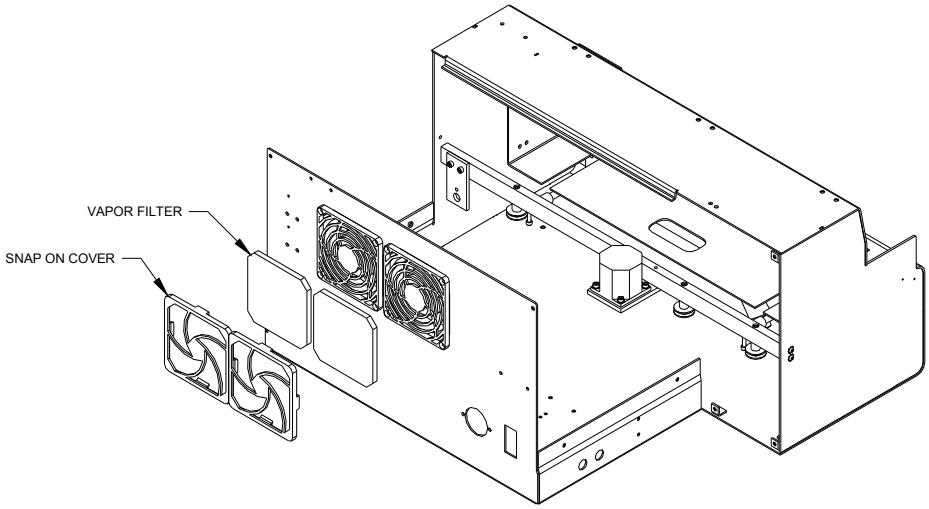
Patent pending

LOKPRINT™ II Operation / Adjustments



Jam Sensor

The jam sensor (illustrated with the bridge removed) is looking for the presence of the fabric for the printer to start and continue to operate. If the fabric in not present, the system will not start and the printer front panel will display a message “Check Stacker”. If the fabric breaks during operation and pulls out of the sensor, the system will stop and printer front panel will again display “Check Stacker”. If the web sags more than the feed can take up before the heat chamber moves to the run position, the web may be pushed out of the jam sensor and stop the system.



Ventilation

The LOKPRINT™ II is equipped with a ventilation system comprising of two fans with carbon filters and multiple internal machine compartments / components. One filter is used to reduce the odors that are exhausted from the heat chamber while the other is used to filter the ambient air drawn in to cool the electronics compartment.

Vapors created during the sublimation process have an odor and may be seen as smoke escaping from the heat chamber area. If there is an unusually high amount of odor or visual smoke escaping near the front of the machine - check the filter(s) on the back of the machine. Make sure they are in place and clean. The filters are held in place with a snap on cover for quick and easy replacement.

The exhaust fan's filter (on the right as viewed from the rear of the machine) will normally need to be turned over after every 2 rolls of ink and replaced after approximately 4 rolls of ink. At the time of replacement it is recommended to move the intake fan's filter to the exhaust fan and install a new filter on the intake fan. This rotation procedure will insure that both filters are kept at peak performance.

As the system pulls fresh air in the front of the heat chamber and exhausts it out the filter - it also cools the outer surfaces of the machine so they are safe to the touch. These surfaces will be warm to the touch, but will not cause burns.

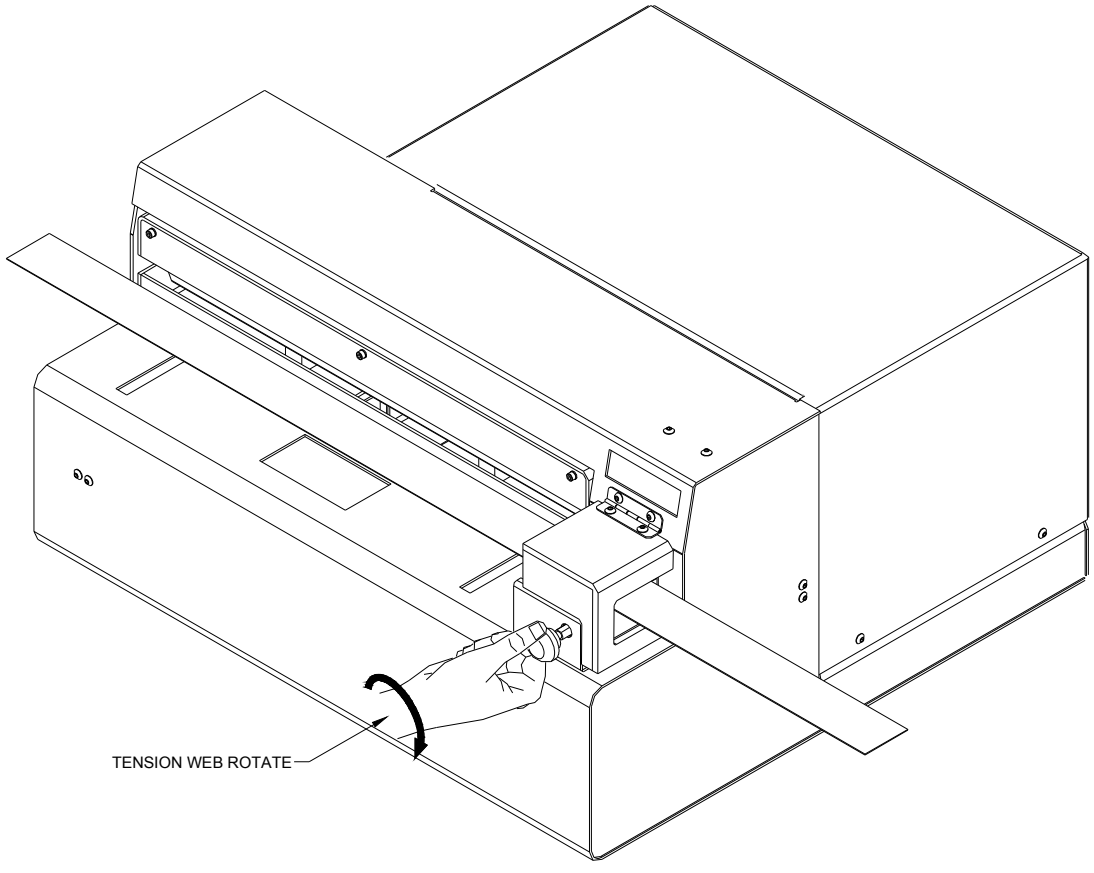
It is extremely important to keep the Plexiglas guard closed at all times during operation except for threading the fabric. The airflow management and heat chamber control systems have both been designed to operate with the guard closed and all the covers in place. Attempting to operate the system with any guard or cover altered or missing will disrupt the control strategies and adversely affect the fabric temperature.

Feed Roller

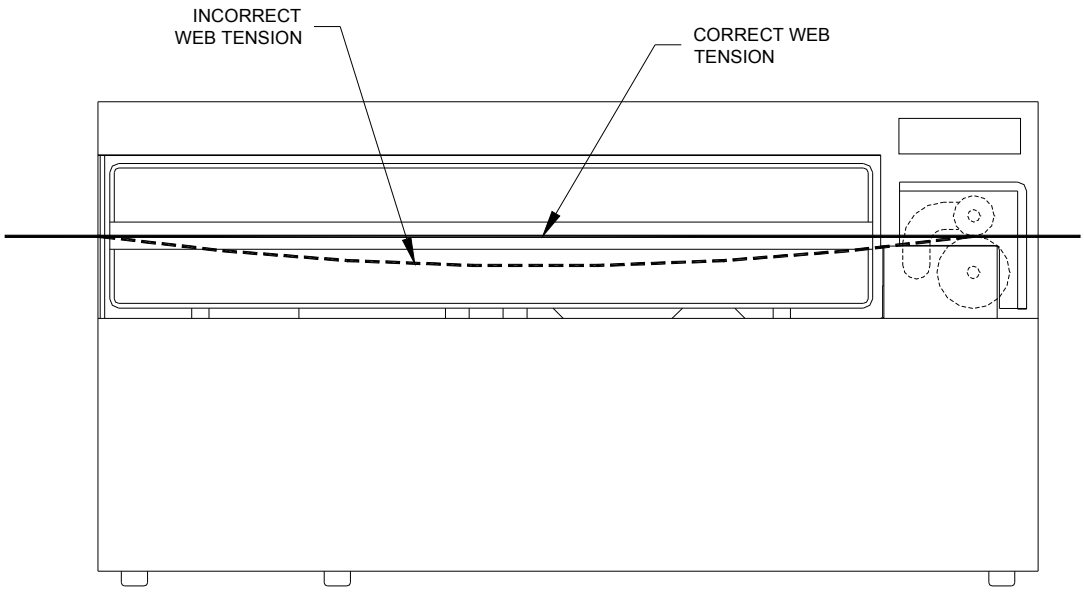
The feed roller has two torsion springs that supply even tension for tracking. If the fabric fails to track properly through printer, check to see if one of the springs have come loose, broken or been stretched out of shape. The feed is equipped with a hand knob used to thread the machine. This knob should turn freely with very little resistance. If resistance occurs, check to see if the roller bearings need to be greased / replaced. Use standard multi purpose grease to lubricate the bearings. To lubricate the bearings - the assembly will need to be disassembled, cleaned and repacked with grease. Do not use contact cleaners to clean the bearings, as this will destroy the needle bearings.

Web Threading

Feed the fabric through the AVERY DENNISON 676 or 636 printer (see the AVERY DENNISON 676 or 636 manual for threading instructions), then through the LOKPRINT™ II and on through the Finishing Station or Cold Knife Cutter. Tension the web with the feed knob to remove excess slack between the printer feed rollers and the LOKPRINT™ II feed rollers. The system will further tension the web at the start of printing, but may not take out excessive web sag.



AVERY DENNISON LOKPRINT™ II



Heat Chamber Care

In the unlikely event that the fabric touches the bulbs - it will melt onto them and / or the inner oven. Remove as many of the un-melted pieces as possible without touching the bulbs.

DO NOT attempt to scrape melted fabric from the bulbs. Any remaining fabric residue will burn off, much like a self-cleaning oven. Simply re-thread a fresh section of fabric and continue printing.

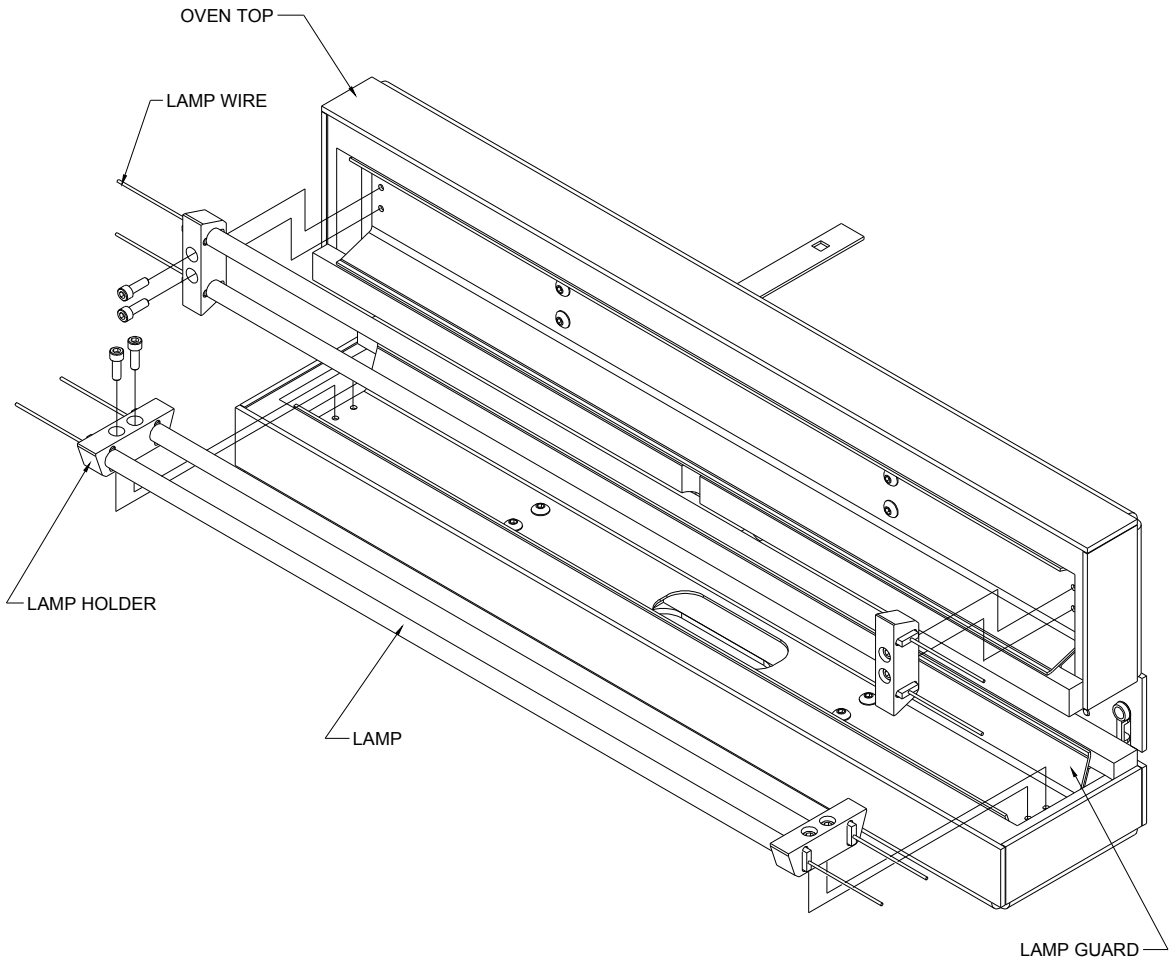
CAUTION: DO NOT try to scrape or chip melted fabric off the IR lamps. This could permanently damage the IR lamp. You will notice an increased amount of smoke in the heat chamber as the bulbs burn off the melted web fabric. This is normal.

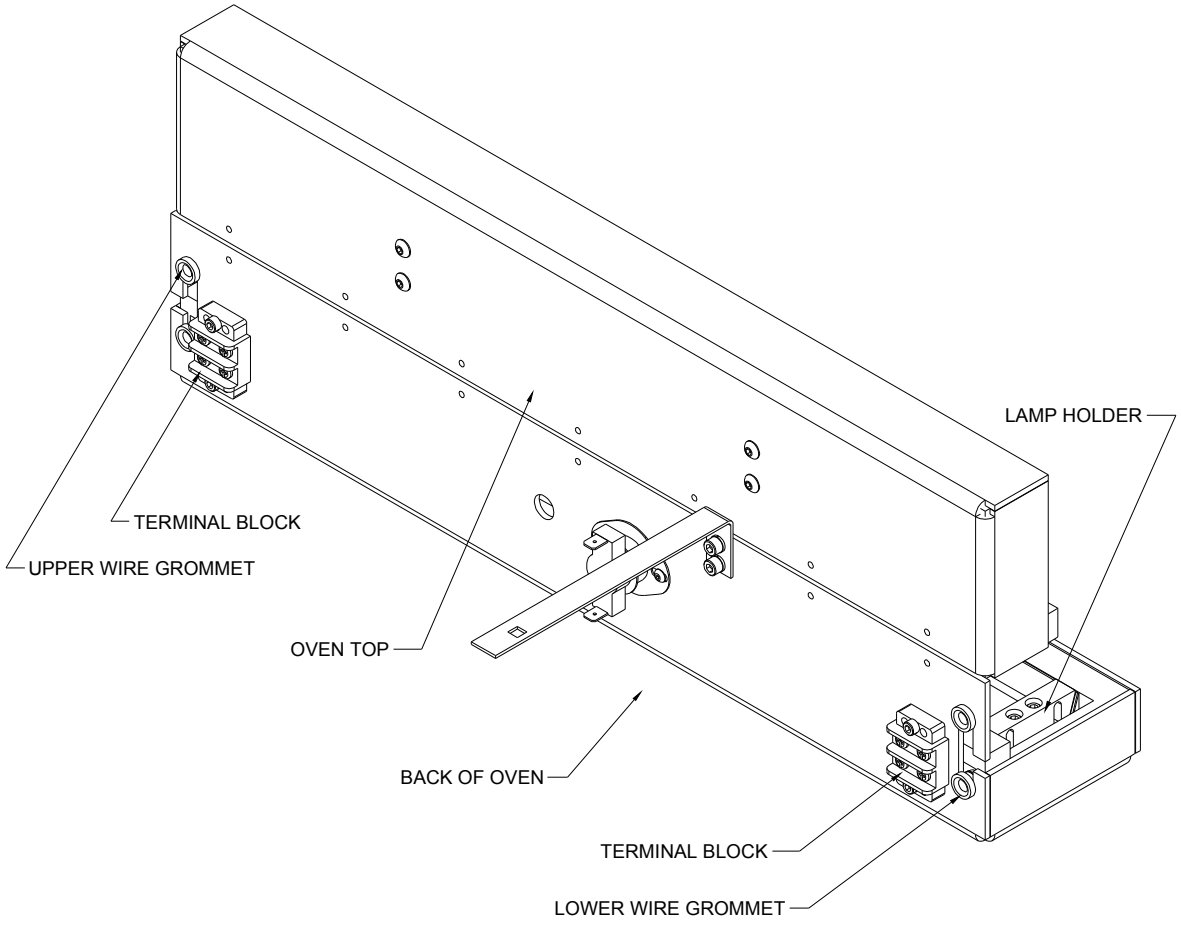
Feed Roller Care

The feed rollers will pick up the ink dye during normal operation. The rollers should be cleaned after every two rolls of ink. The rollers can be cleaned with alcohol and a nylon bristle toothbrush. The rollers have a Teflon® coating that can be damaged if cleaned with a wire brush, making it very difficult to clean once the coating is worn off. The alcohol used for cleaning should have an alcohol content of 70% or higher and can be purchased from your local drug store.

Lamp Replacement Procedure

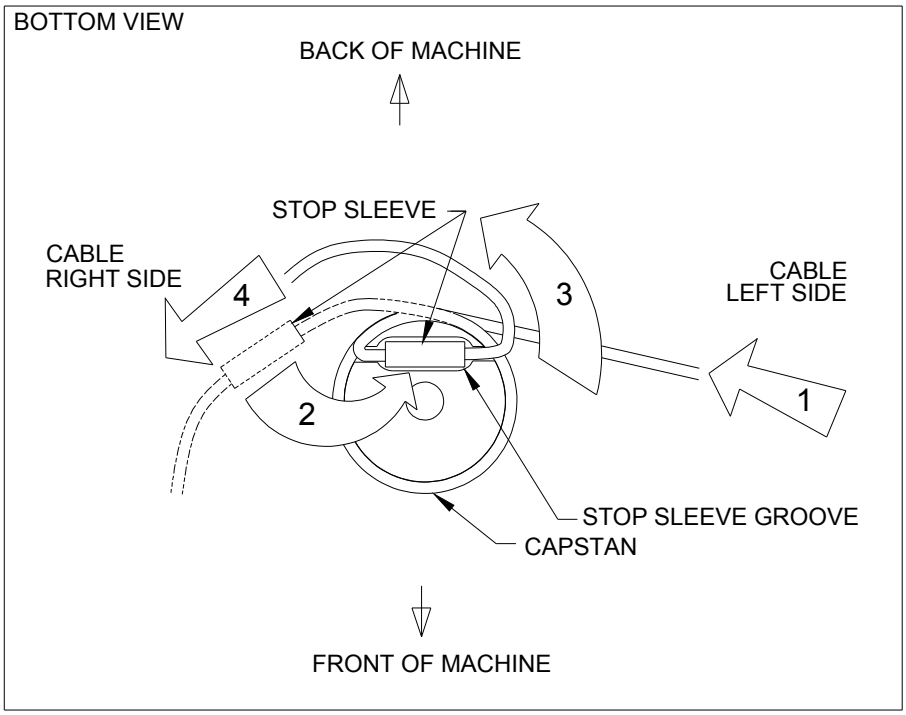
1. Remove rear cover from machine chassis. Disconnect the lamp wires from the two terminal blocks located on the back of the lamp oven for the defective lamp(s).
2. At front of the machine, open clear, plastic oven guard and move lamp oven forward. Oven top is hinged. Swing oven top upward to expose lamp guards and lamps.
3. Unscrew lamp holders from lamp guards and remove the defective lamp(s) and lamp holders. Replace old or defective lamp(s).
4. Re-assemble lamp holders and lamps to lamp guards. Do not over tighten the lamp holders and crack the mounts. Feed lamp wires through wire grommets in back of oven. Ensure upper wires go through upper grommets and lower wires go through lower grommets. Re-connect lamp wires to the terminal blocks located on the back of the lamp oven.
5. Close top to lamp oven. Re-attach rear cover to main chassis. Close clear plastic oven guard.




LAMP HOLDER
TERMINAL BLOCK
UPPER WIRE GROMMET
OVEN TOP
BACK OF OVEN
TERMINAL BLOCK
LOWER WIRE GROMMET

Drive Cable Replacement Procedure

Installing the Drive Cable at the Capstan



1: Feed the drive cable in from left hand side and wind around the Capstan five times, starting from the top and working down to the bottom.

2: Wrap the Drive Cable into the Stop Sleeve Groove so that the Stop Sleeve fits.

3: Once the Drive Cable exits the Stop Sleeve Groove, wrap the Drive Cable around the Capstan again.

4: Continue feeding the Drive Cable forward to the right side and around the Drive Cable pulleys on the machine.

Troubleshooting

Problem	Probable Cause	Corrective Action
Web will not advance	1) Insufficient feed pressure.	1) Check for broken spring. 2) Spring is off pressure mount pin. 3) Clean ink build up from grit rollers. 4) Check for thread fiber in feed roller bearings.
	2) Defective feed component.	1) Check for loose or broken feed timing belt. 2) Check for loose setscrews on feed motor or grit roller driven shaft. 3) Check for worn bearings. 4) Worn feed or pressure grit rollers. 5) Rheostat out of adjustment – Call for service support 6) Defective feed motor
Web will not sublimate completely.	1) IR lamp(s) out	1) Replace blown lamp(s). 2) Inspect wire leads from lamps 3) Check for loose terminal block connection.
	2) Defective IR sensor	1) Replace
	3) Defective sensor controller	1) Replace
	4) Blocked filters	1) Replace filters
	5) Web is not tracking through the middle of the heat chamber.	1) Move the LOKPRINT™ II so the web tracks in the center of the heat lamps.
Smoke coming from the front of Heat Chamber.	1) Blocked filter	1) Replace filter(s).
	2) Fan not operational	1) Check blown fuse. 2) Replace defective fan.
	3) Web broken or fallen on IR lamps causing excessive build up on lamps	1) Stop system and allow the build up to burn off.

Interlock Trouble Shooting Guide

The following is a list of Lokprint II problems along with possible causes / remedies of each that will stop the host printer with a check stacker error:

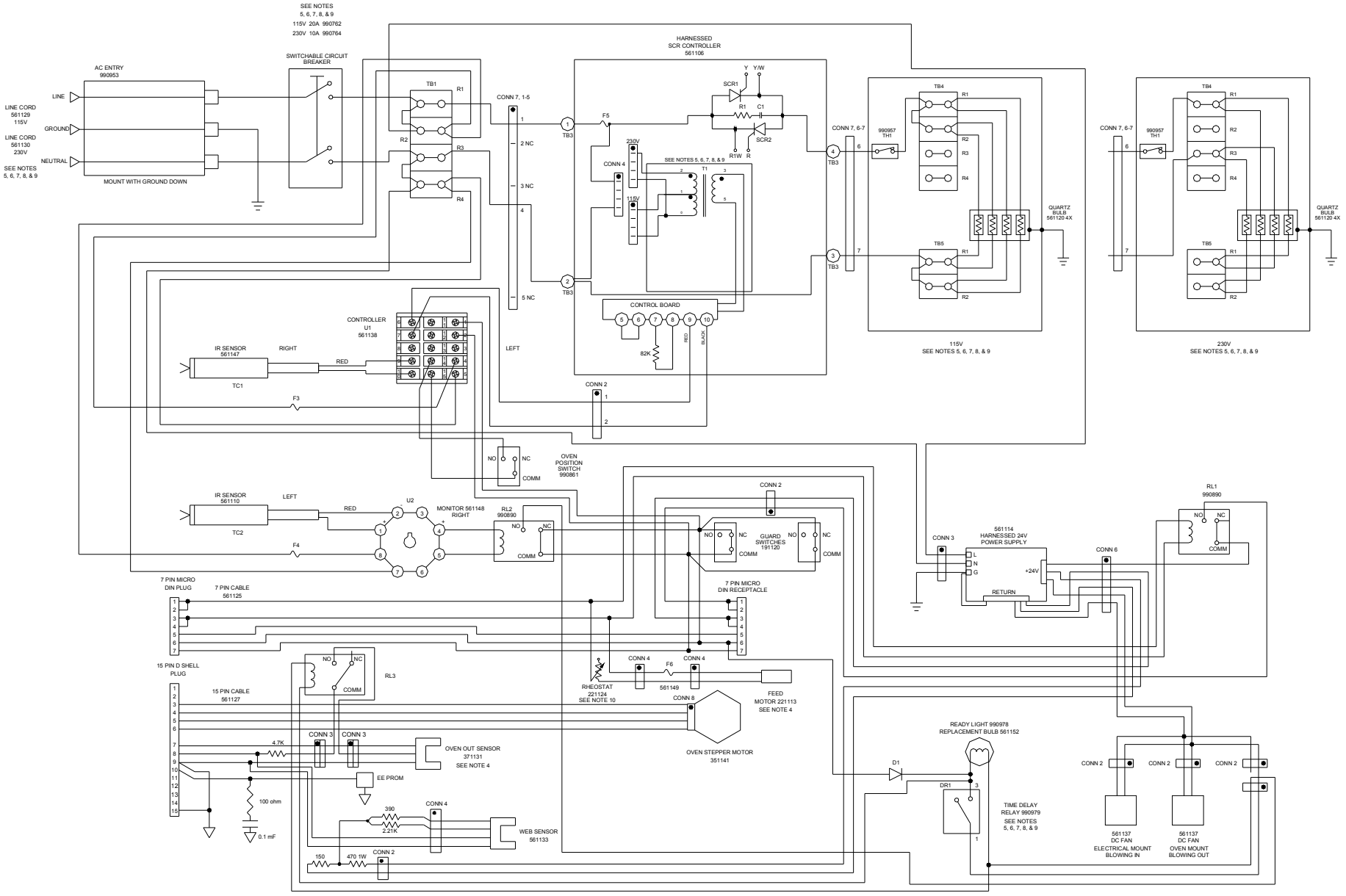
Problem	Probable Cause	Corrective Action
No lights on / in Lokprint II Check Stacker error cannot be cleared. System will not start.	Power switch position.	Toggle power switch on back of Lokprint II box.
	Power switch over current trip.	Confirm power switch rating matches machine line voltage.
		Check lamp-wiring matches machine line voltage.
		Check SCR Controller strapping matches machine line voltage.
	Outlet / power fault.	Plant electrician.
Lokprint II READY light is not on. Check Stacker error cannot be cleared. System will not start.	Insufficient time since the Fuji sensed the top of the inner oven at 400°.	Wait 8 minutes after the C light on the Fuji turns on.
	Ready light bulb fault.	Evaluate / replace bulb as needed.
	Wiring error / fault.	Confirm proper connection of 7-pin connector between the Lokprint II and the 676.
		Confirm wiring of all component(s) that were replaced.
	U1 Controller programming error.	AVERY DENNISON service to confirm / reprogram as needed.
	U1 offset error.	AVERY DENNISON service to confirm / set exit temperature as needed.
	U2 Monitor programming error.	AVERY DENNISON service to confirm / reprogram as needed.
	U2 offset error.	AVERY DENNISON service to confirm / set offset as needed.
	SP / SP2 switch bale misalignment or fault.	Adjust / evaluate / replace oven position switch.
	Oven lamp wiring error / fault.	Check lamp wiring matches machine line voltage / evaluate / replace as needed.
	U2 Sensor fault.	Evaluate / replace sensor, requires AVERY DENNISON service to confirm / set exit temperature as needed.
	U2 Monitor fault.	Evaluate / replace U2, requires AVERY DENNISON service to confirm / set exit temperature as needed.
	U1 Sensor fault.	Evaluate / replace sensor, requires AVERY DENNISON service to confirm / set exit temperature as needed.
	U1 Controller fault.	Evaluate / replace U1, requires AVERY DENNISON service to confirm / set exit temperature as needed.

Problem	Probable Cause	Corrective Action
Lokprint II READY light is on. Check Stacker error can be cleared. Oven travels out or attempts to travel out and immediately retracts.	Oven obstacle.	Remove / adjust obstacle so that oven travels freely.
	Oven to guard insulation strip misalignment.	Adjust insulation strip for full oven engagement without interference.
	Oven out sensor misadjust / wiring error / fault.	Adjust sensor for proper oven position / evaluate / replace sensor.
	Oven drive line fault, mechanical or electrical.	Evaluate the drive line for mechanical binds / problems.
		Confirm proper connection of 15-pin connector between the Lokprint II and the 676.
	No web.	Thread the web through the Lokprint II
	Web not centered in web sensor.	Center the web in the Lokprint II web sensor.
	Web sensor IR shield missing.	Reinstall the IR shield.
	Web sensor / wiring fault.	Evaluate / replace the web sensor.
System stops during batch Lokprint II READY light goes out. Check Stacker error cannot be cleared for 8 minutes. System will not start.	SP2 Misadjusted.	AVERY DENNISON service to confirm / set SP2 as needed.
	U1 Controller programming error.	AVERY DENNISON service to confirm / reprogram as needed.
	U1 offset error.	AVERY DENNISON service to confirm / set exit temperature as needed.
	U2 Monitor programming error.	AVERY DENNISON service to confirm / reprogram as needed.
	U2 offset error.	AVERY DENNISON service to confirm / set offset as needed.
	Oven lamp wiring error / fault.	Evaluate the four lamps / wiring / replace as needed.
	U1 Sensor fault.	Evaluate / replace sensor, requires AVERY DENNISON service to confirm / set exit temperature as needed.
	U2 Sensor fault.	Evaluate / replace sensor, requires AVERY DENNISON service to confirm / set exit temperature as needed.
	U1 Controller fault.	Evaluate / replace U1, requires AVERY DENNISON service to confirm / set exit temperature as needed.
	U2 Monitor fault.	Evaluate / replace U2, requires AVERY DENNISON service to confirm / set exit temperature as needed.

Problem	Probable Cause	Corrective Action
Lokprint II READY light is on. Check Stacker error can not be cleared. System will not start.	Lokprint II guard open.	Close guard.
	Finishing Station stacker platform at bottom of its travel.	Remove labels and raise platform.
Finishing Station displays Close Guard.	Finishing Station guard open.	Close guard.
U1 readout > 800°.	U1 Sensor misalignment.	AVERY DENNISON service to realign sensor.
	U1 Controller programming error.	AVERY DENNISON service to confirm / reprogram as needed.
	U1 Sensor fault.	Evaluate / replace IR sensor, requires AVERY DENNISON service to confirm / set exit temperature as needed.
	U1 Controller fault.	Evaluate / replace U1, requires AVERY DENNISON service to confirm / set exit temperature as needed.
	SCR fault.	Evaluate / replace SCR.
Lokprint II READY light is on. Oven travels out or attempts to travel out and immediately retracts. Check stacker error can be cleared.	Oven out sensor misadjustment.	Adjust the oven out sensor mount bracket position as needed.
	Oven to guard insulation strip misalignment.	Adjust the guard insulator strip as needed.
	Guard switch bale(s) misadjusted.	Adjust the switch bale(s) as needed.
Lokprint II Ready light is not on. Check Stacker error can be cleared. System starts but does not pull fabric though the oven. System stops during batch Lokprint II READY light is on. Check Stacker error can be cleared. Finishing Station displays Align Stock	7 pin connector between the Lokprint II and 676 partially or completely disconnected.	Reinsert the 7-pin connector.
	Finishing Station sensor misadjusted.	Align sensor and fabric so that the sensor mark is the first thing the sensor will see at restart.
		Adjust the sensor sensitivity to respond to the sense mark on the fabric.
	Finishing Station cut length misadjusted.	Set the cut length on the Finishing Station front panel to match the distance between the sense marks on the fabric after the Lokprint II oven.
	Lokprint II exit temperature too high.	AVERY DENNISON service to confirm / set exit temperature as needed.

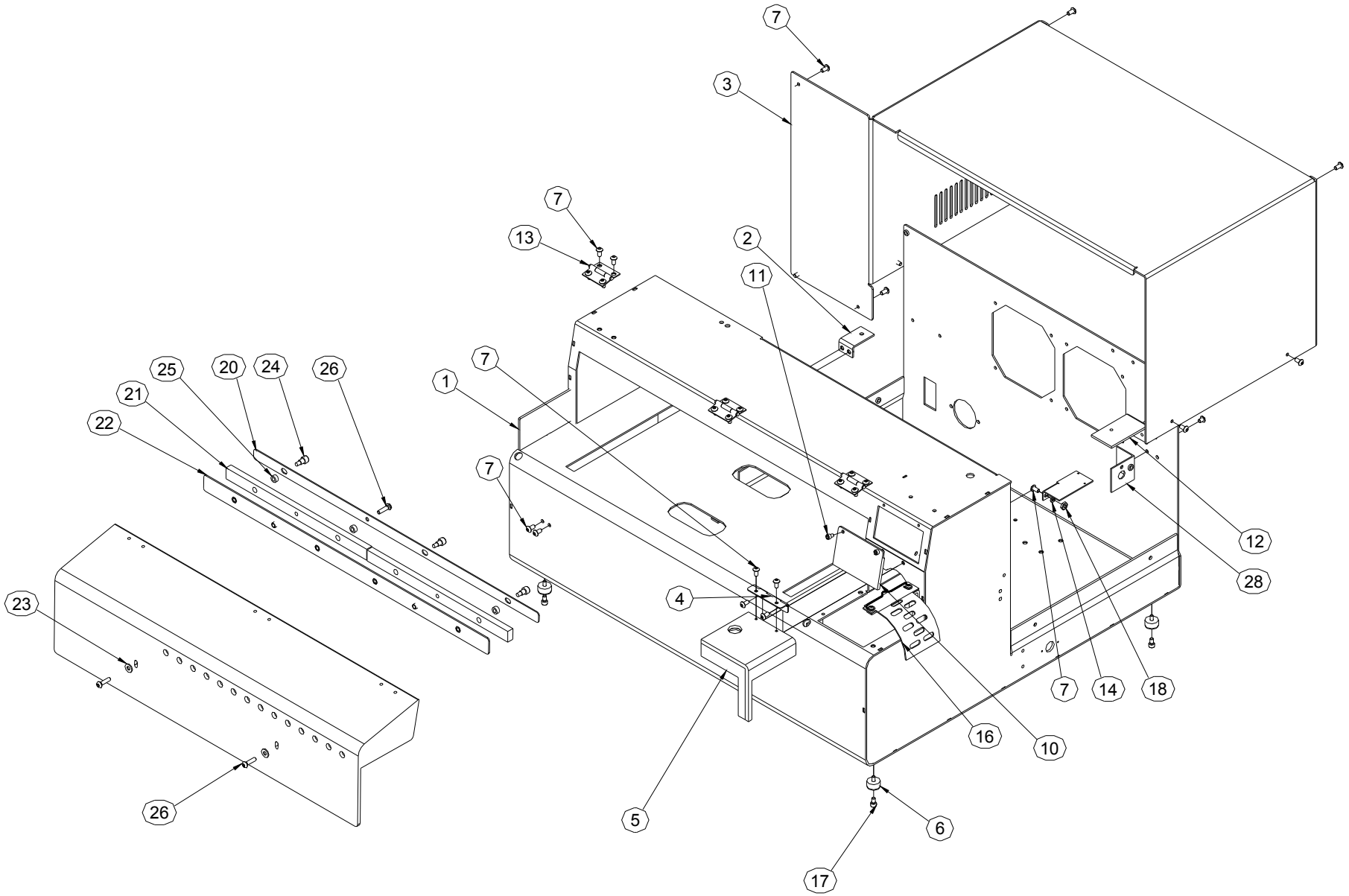
Electrical Schematic

115 / 230 Volt Schematic



Mechanical Assembly Drawings

Cover Assembly

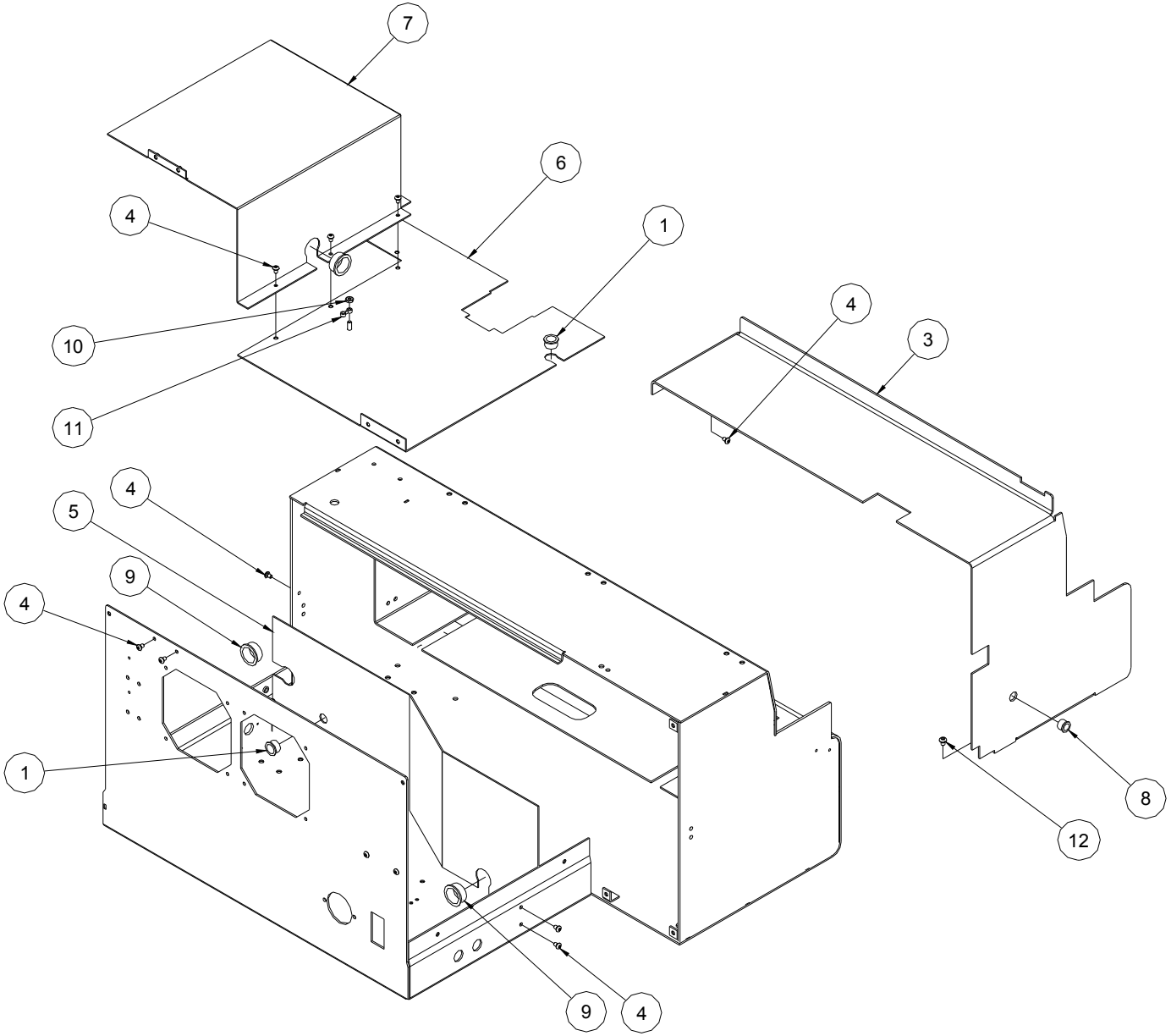


Cover Parts List

Item	Part #	Description	Qty
1	561203	Cover, Chassis, Main	1
2	565008	Bracket, Mount, Pulley	1
3	561204	Cover, Chassis, Back	1
4	561206	Hinge, Feed cover	1
5	561205	Cover, Feed	1
6	991199	Bumper, Rubber 8-32	5
7	990090	10-32 x 3/8 Button head screw	29
8	990052	10-32 x 1/2 Cap screw	5
9	565032	Bracket, In-out oven switch	1
10	561210	Cover, Controller	1
11	990050	8-32 x 1/4 Cap screw	2
12	565034	Bracket, Control switch	1
13	224051	Hinge, Access cover	3
14	990728	Washer, #10 lock	2

Item	Part #	Description	Qty
15	561133	Sensor, Web harness (not shown)	1
16	564019	Ass'y, Stripper	1
17	990052	10-32 x 5/16" Socket hd cap scr	5
18	990103	10-32 Hex nut	2
19	990089	10-32 x 1/4" Button hd cap screw	1
20	561221	Guard, Inner baffle	1
21	565027	Baffle, Heat unit	2
22	561218	Guard, Baffle flange	1
23	990014	# 10 Flat washer	2
24	990230	10-32 x 1/4" Shoulder screw	3
25	565051	Spacer, Baffle	4
26	990092	10-32 x 3/4" Button hd cap screw	3
27	561209	Cover, Front, Heat unit	1
28	565050	Bracket, Rheostat	1

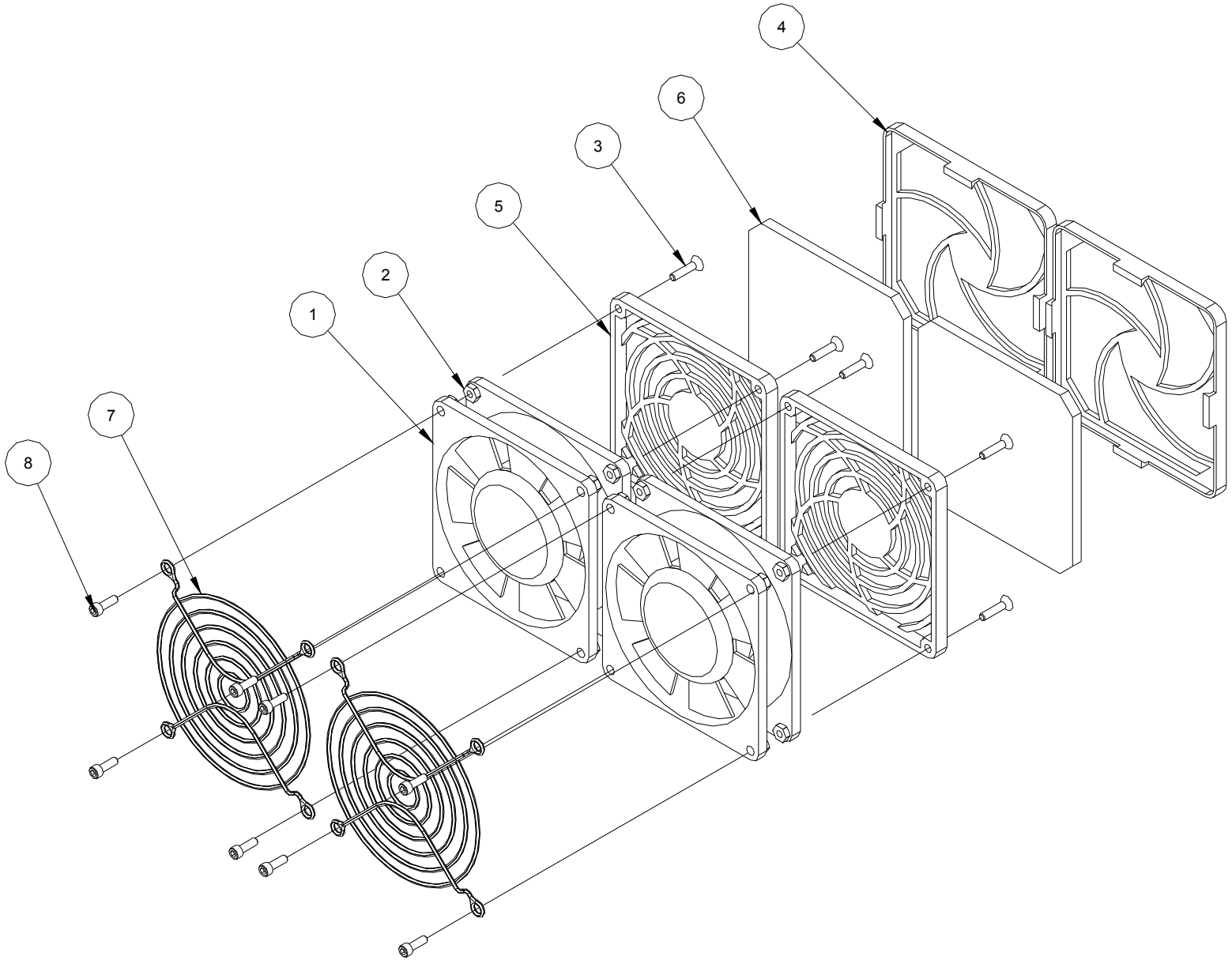
Baffle Assembly



Baffle Parts List

Item	Part #	Description	Qty
1	990811	Strain Relief, 5/8 x 1/2	3
2	561203	Cover, Chassis, Main (Ref Only)	1
3	561217	Guard, Top baffle	1
4	990066	8-32 x 1/4 Button head screw	16
5	561211	Guard, Lower baffle	1
6	561213	Guard, Horizontal baffle	1
7	561212	Guard, SCR baffle	1
8	990984	Strain relief, 1/2 x 3/8	1
9	990985	Strain relief, 1 x 3/4	3
10	990069	Hex nut, #8	1
11	990512	Tie wrap, TY534M	1
12	990089	10-32 x 1/4 Button head screw	2

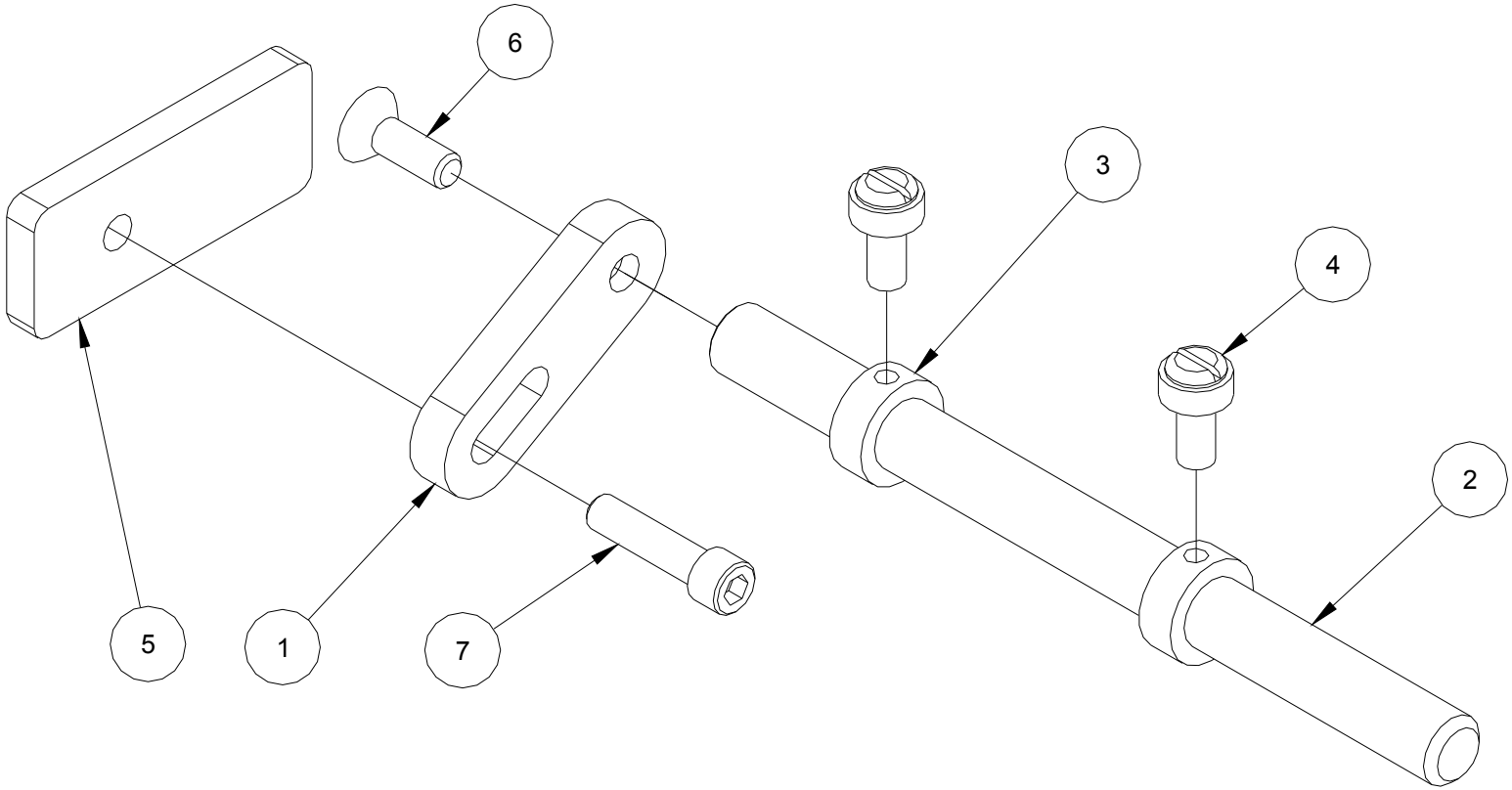
Air Filter Assembly



Air Filter Parts List

Item	Part #	Description	Qty
1	561137	Fan, Exhaust	2
2	990069	Hex nut, 8-32	16
3	991198	8-32 x 3/4 Flat head cap screw	8
4	991196	Assembly, Fan filter	2
5	991196	Assembly, Fan filter	2
6	565023	Filter, Lokprint	2
7	561140	Fan, Finger guard	2
8	990052	8-32 x 1/2 Cap screw	8

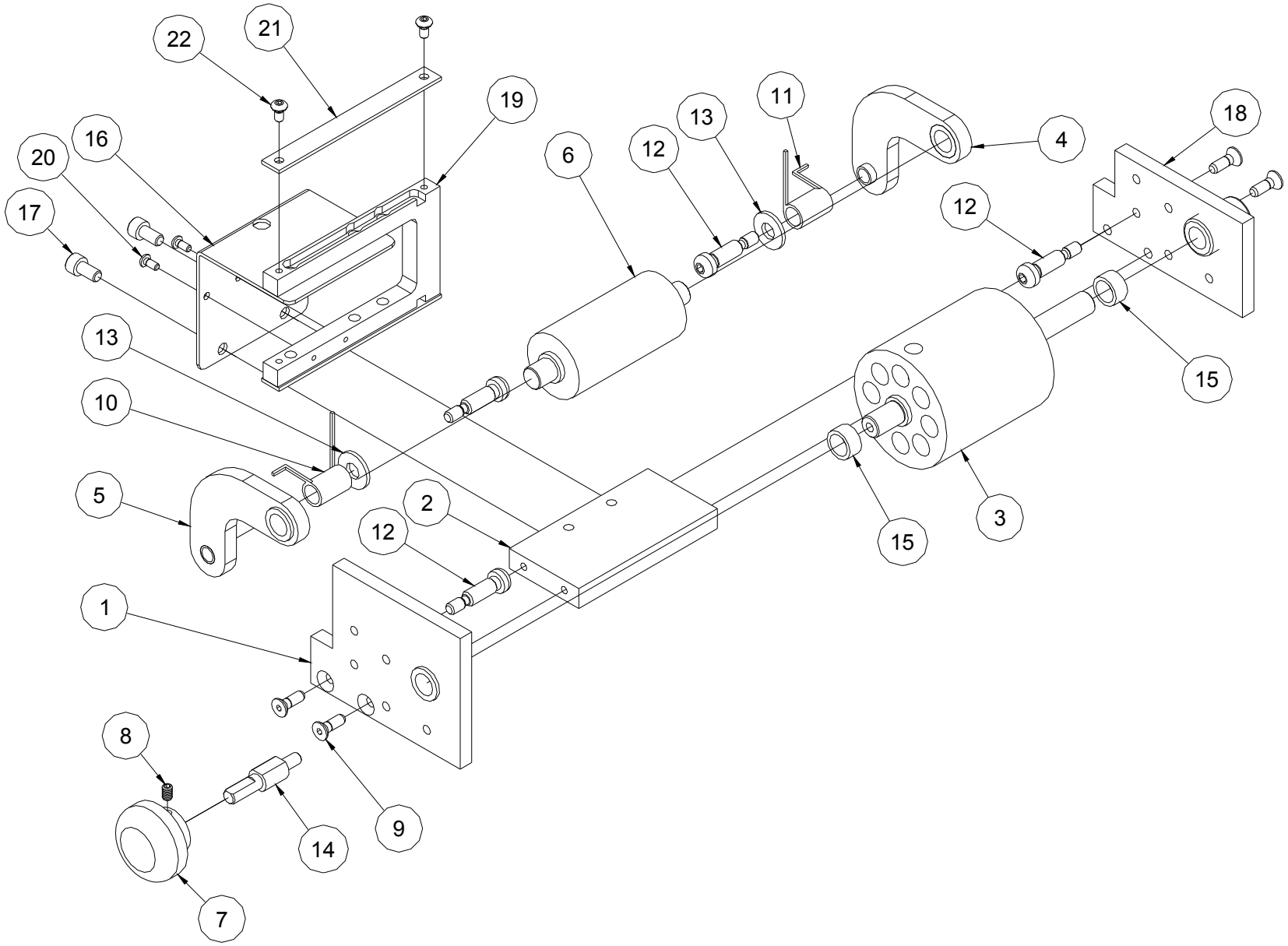
Web Guide Assembly



Web Guide Parts List

Item	Part #	Description	Qty
1	353004	Roller mount	1
2	194020	Web turn shaft	1
3	990374	1/2 Collar	2
4	990484	1/4-20 x 1/2 Nylon slotted screw	2
5	565021	Bracket, Tie bar	1
6	990133	1/4-20 x 3/4 Flat head screw	1
7	990123	1/4-20 x 1 Cap screw	1

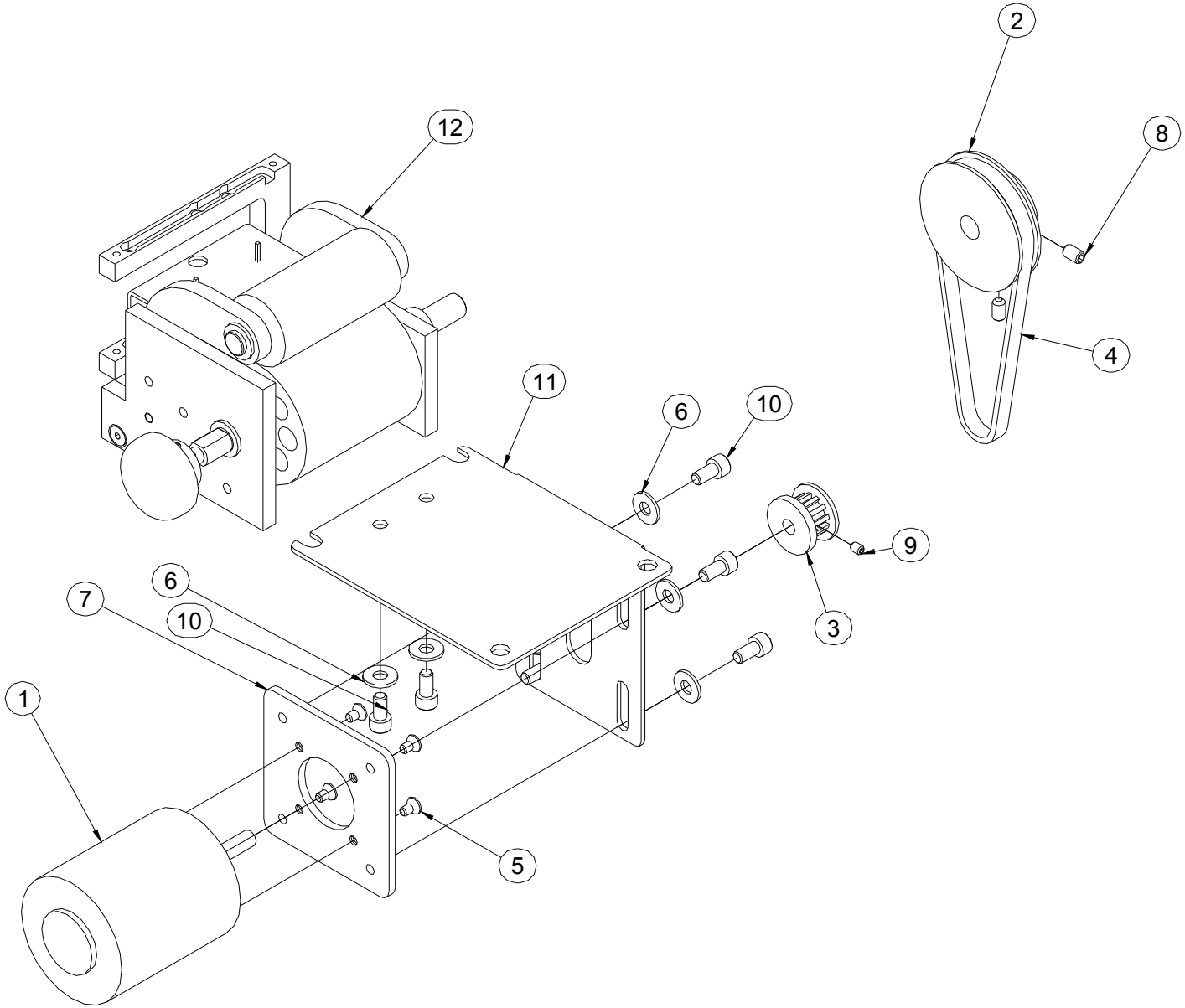
Drive Assembly



Drive Parts List

Item	Part #	Description	Qty
1	564033	Assembly, Mount plate, Front	1
2	564005	Bracket, Base, Feed	1
3	564031	Assembly, Grit roller	1
4	564034	Assembly, Pressure arm, Rear	1
5	564035	Assembly, Pressure arm, Front	1
6	564030	Assembly, Grit roller, Upper	1
7	105023	Knob, Impression adjust	1
8	990058	8-32 x 1/4 Knurled cup point	1
9	990456	8-32 x 1/2 Flat hd cap screw	4
10	564010	Spring, Feed right	1
11	564011	Spring, Feed left	1
12	991194	1/4 x 1 shoulder bolt 10-32	4
13	990167	Washer, 1/4 SAE	2
14	564013	Shaft, Knob adapter	1
15	999108	Bushing, 3/8 x 1/2 x 1/4	2
16	564016	Bracket, Jam sensor mount	1
17	990080	10-32 x 3/8" Socket hd cap screw	2
18	564032	Ass'y, Mount plate rear	1
19	378064	Bracket, Jam sensor	1
20	989983	4-40 x 1/4 Button head screw	2
21	378060	Guard strip, Jam sensor	2
22	990019	6-32 x 1/4 Button head screw	4

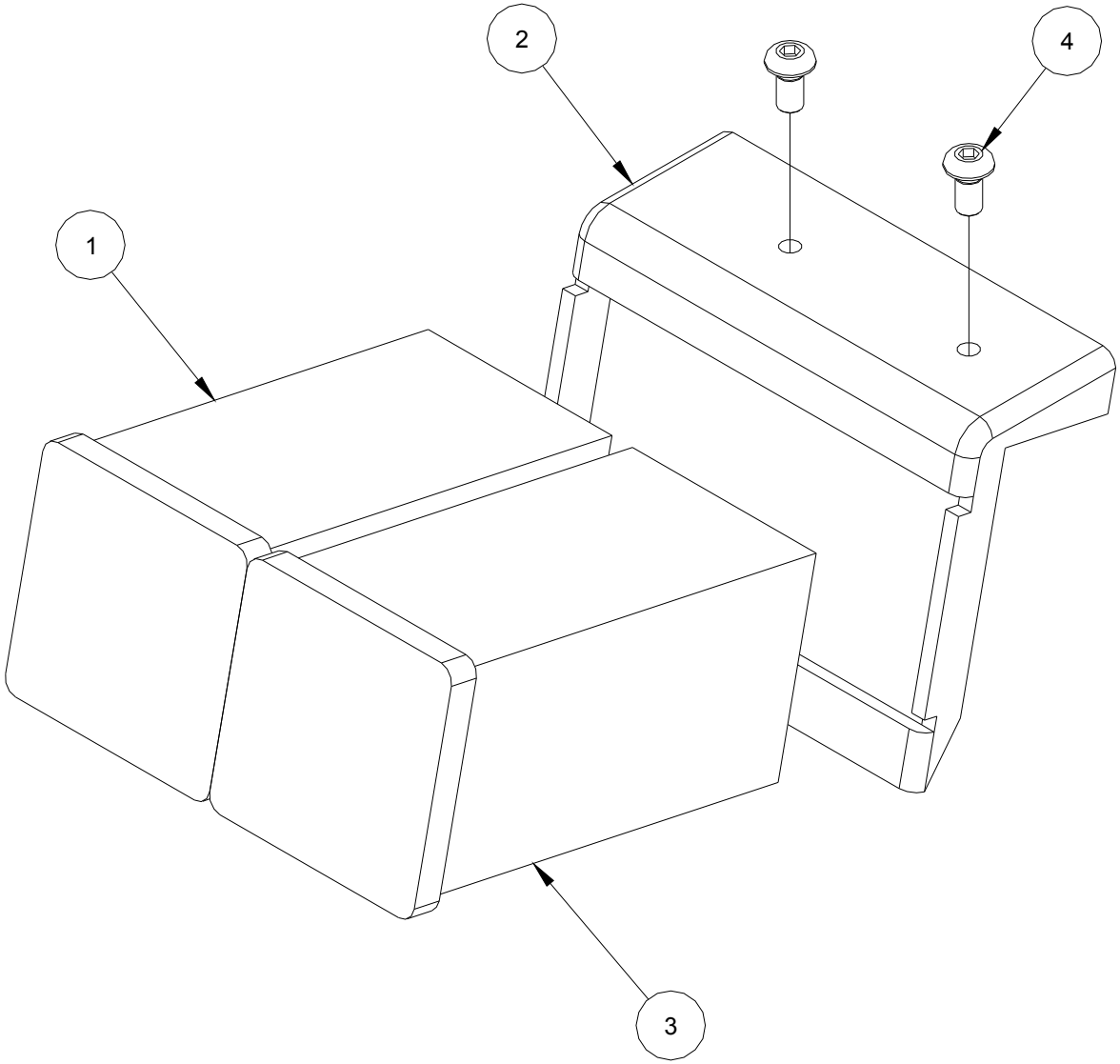
Feed Assembly



Feed Parts List

Item	Part #	Description	Qty
1	221113	Motor, Feed / Deflect harnessed	1
2	562001	Sprocket, 30T Timing	1
3	562002	Sprocket, 10T Timing	1
4	991113	Drive, Timing belt, 54T x 1/4	1
5	990029	6-32 x 1/4 Flat head screw	4
6	990102	Washer, #10 SAE	6
7	224067	Bracket, Motor mount	1
8	990095	10-32 x 3/8 Set screw	2
9	990756	6-32 x 3/16 Set screw	1
10	990080	10-32 x 3/8 Cap screw	6
11	564021	Bracket, Feed	1
12	564090	Ass'y, Feed, 2 Sided LKP	1

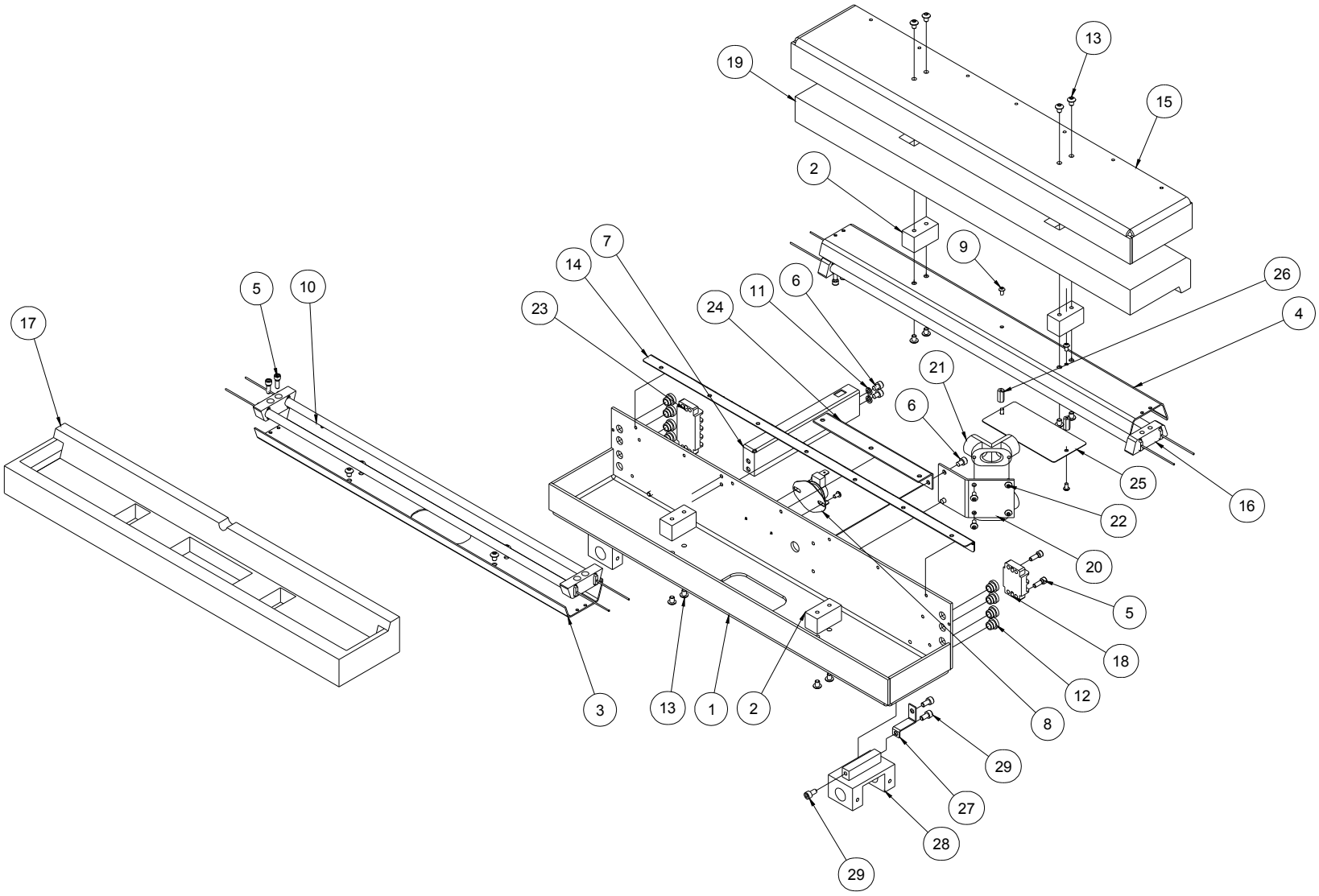
Controller Assembly



Controller Parts List

Item	Part #	Description	Qty
1	561138	Controller, Chromalox, Programmed	1
2	564017	Bracket, Controller	1
3	561148	Controller, Fuji, Programmed	1
4	990090	10-32 x 3/8 Button head screw	2

Heat Chamber Assembly

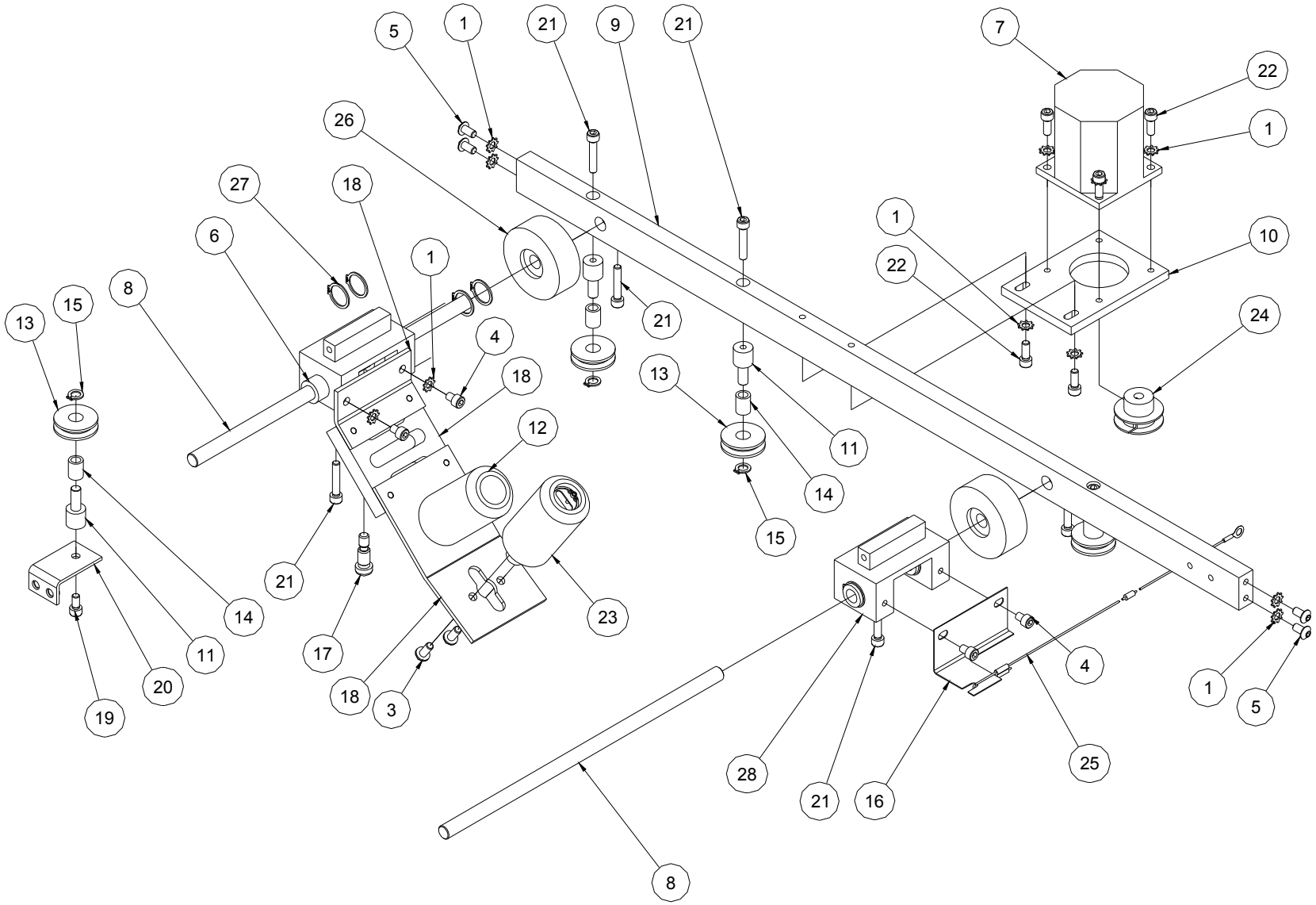


Heat Chamber Parts List

Item	Part No.	Description	Qty.
1	565002	COVER, LAMP GUARD	1
2	565004	BRACKET, MOUNT, GUARD	4
3	561201	COVER, GUARD,LAMP LOWER	1
4	561202	COVER, GUARD,LAMP, UPPER	1
5	990052	8-32 X ½ SOCKET HD CAP SCR	10
6	990079	10-32 X 1/4 CAP SCREW	4
7	565016	BRACKET, FLAG, SENSOR	1
8	990957	SENSOR, 250 D, 25A THERMOSTAT	1
9	990019	6-32 X 1/4 BUTTON HEAD SCREW	6
10	561120	QUARTZ LAMP HARNESSED	4
11	990728	WASHER, #10 LOCK	2
12	565020	BUSHING, WIRE	8
13	990089	10-32 X 1/4 BUTTON HEAD SCREW	16
14	565030	HINGE, COVER, LAMP GUARD	1
15	565029	COVER, LAMP GUARD, UPPER	1

Item	Part No.	Description	Qty.
16	565026	BRACKET, MOUNT LAMP	4
17	561215	GUARD, OVEN INSULATION	1
18	990941	ELECTRICAL, TERMINAL BLOCK 2X2	1
19	561219	GUARD, OVEN INSULATION, UPPER	1
20	565036	BRACKET, WIRE HARNESS	1
21	561144	CONNECTOR, CABLE	2
22	990065	8-32 X 3/8 BUTTON HEAD SCREW	4
23	990768-1	ELECTRICAL, TERMINAL BLOCK 2X4	1
24	565043	BRACKET, OVEN CLAMP	1
25	565044	COVER, LAMP	1
26	181148	6-32 BUTTON HD CAP SCREW	2
27	565058	SLIDE BRACKET	2
28	565057	BRACKET, SLIDE MOUNT	2
29	990080	10-32 x 3/8 SOCKET HD CAP SCR	6

Slide Mechanism Assembly

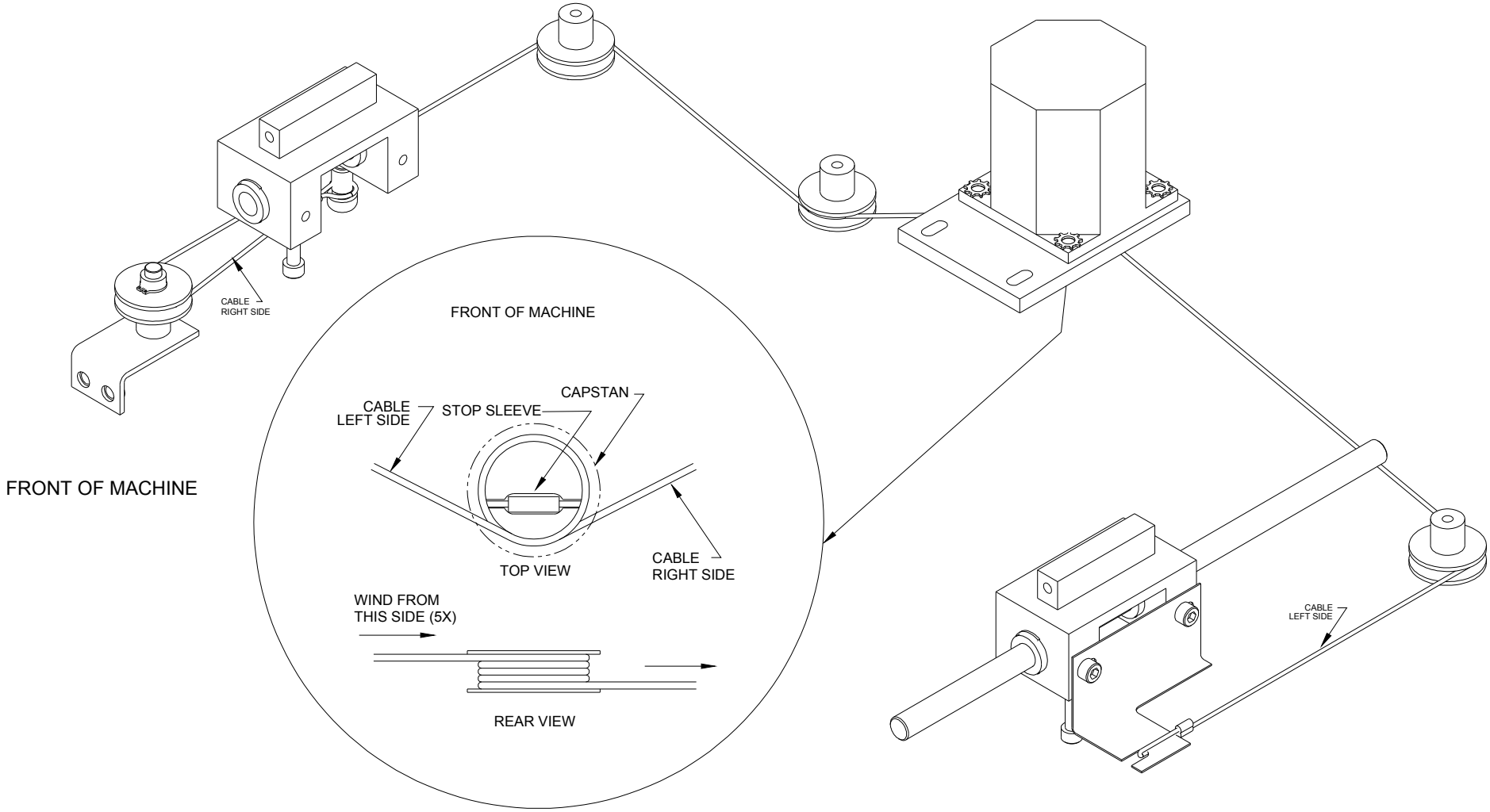


Slide Mechanism Parts List

ITEM	Part No.	Description	Qty
1	989977	WASHER, #10 STAR	12
2	991183	EXTENSION SPRING (NOT SHOWN)	2
3	990940	MOUNTING SCREW FOR IR SENSOR	4
4	990079	10-32 X 1/4 CAP SCREW	4
5	990090	10-32 X 3/8 BUTTON HEAD SCREW	4
6	285027	LINEAR BEARING	4
7	351141	STEPPER MOTOR, HARNESSED	1
8	565010	SHAFT, SLIDE MOUNT	2
9	565009	BRACKET, MOUNT STIFFNER	1
10	564003	BRACKET, MOUNT,STEPPER MOTOR	1
11	224068	SHAFT, IDLER PULLEY	4
12	561147	ASSY, IR SENSOR, HARN. FOCUSED	1
13	224073	DRIVE, IDLER PULLEY	4
14	999103	BUSHING, 1/4 X 3/8 X 1/2	4

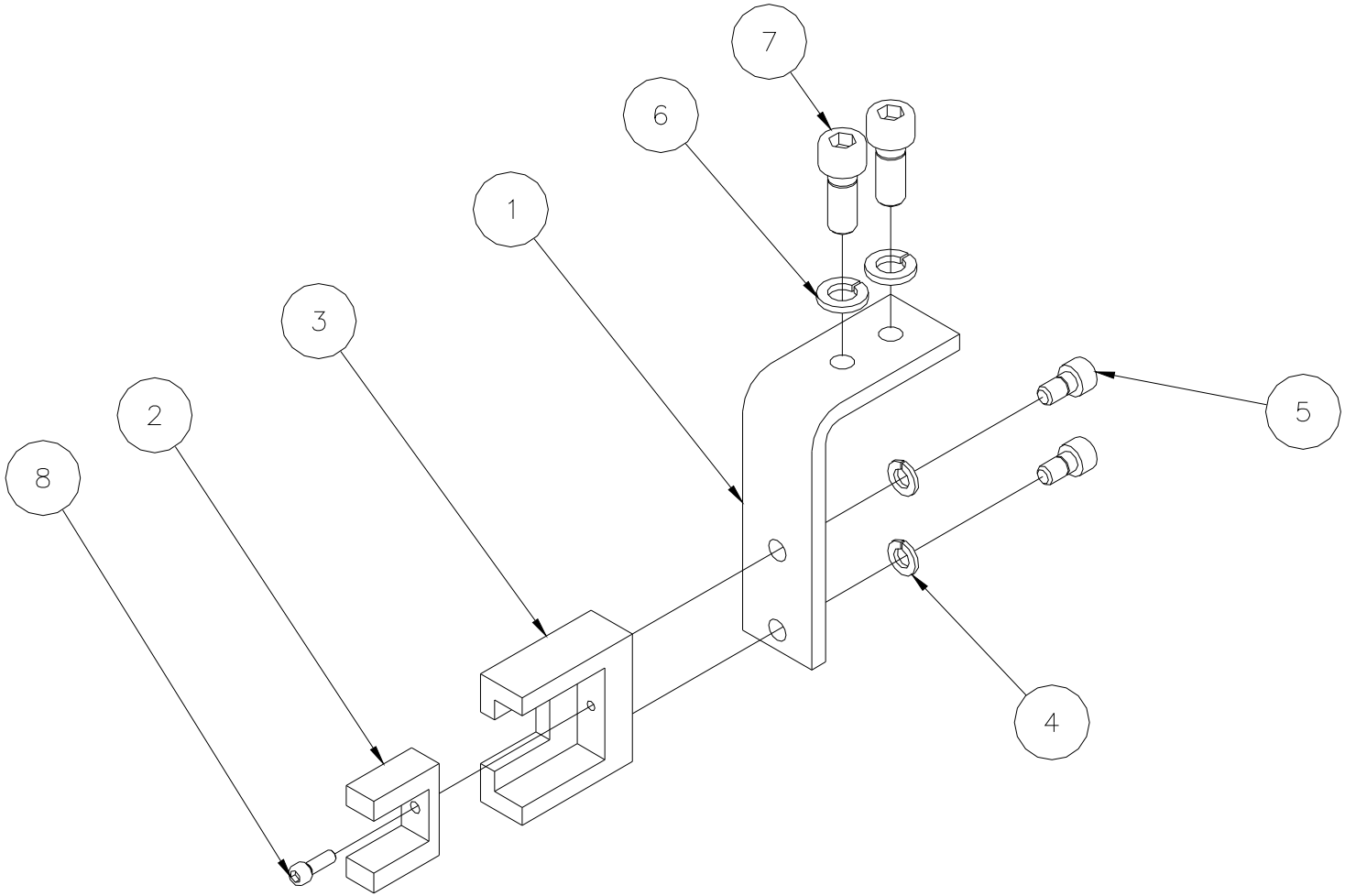
ITEM	Part No.	Description	Qty
15	990262	SNAP RING, 1/4"	4
16	565042	BRACKET, CABLE	1
17	991194	1/4 X 1 SHOULDER BOLT 10-32	1
18	565033	BRACKET, PYROMETER	1
19	991182	10-32 X 3/8 CAP SCREW	1
20	565008	BRACKET, MOUNT, PULLEY (REF)	1
21	990084	10-32 X 1 CAP SCREW	7
22	990081	10-32 X 1/2 CAP SCREW	6
23	561110	SENSOR, IR HARNESSED	1
24	562003	HEAD, DRIVE, CAPSTAN	1
25	564024	DRIVE, FEED CABLE	1
26	565095	KEEPER, BEARING BLOCK	2
27	991246	COLLAR, SNAP RING 5/8"	8
28	565057	BRACKET, SLIDE MOUNT	2

Cable Routing Diagram



This page intentionally left blank

Home Sensor Assembly



Home Sensor Parts List

Item	Part #	Description	Qty
1	565015	Bracket, Sensor	1
2	371131	Harness, Ink out sensor	1
3	358024	Jam sensor bracket	1
4	989976	#6 Star washer	2
5	990015	6-32 x 1/4 Cap screw	2
6	990728	#10 Lock washer	2
7	990081	10-32 x 1/2 Cap screw	2
8	990000	2-56 x 1/4 Cap screw	1